

App. Serial No.: 09/612,612

Atty. Docket No.: 0069-011

### REMARKS

These remarks are in response to the final Office Action dated January 26, 2005, which has a shortened statutory period for response set to expire April 26, 2005. No extension of time is required. This amendment is filed within two months of the mailing date of the final Office Action.

### Claims

Claims 1-19 are pending in the above-identified application. Claims 10 and 14 were previously canceled. Claims 1-9, 11-13, and 15-19 are rejected over prior art. Claims 1, 12-13, 15-16, and 19 are amended herein, and Claim 18 is canceled herein. Thus, Claims 1-9, 11-13, 15-17, and 19 currently remain in the application. Reconsideration is requested.

### Interview Summaries:

Two interviews have been conducted since the mailing of the current Office Action. The first was held on March 1, 2005, between Examiner Carl Colin and Applicant's attorney Larry E. Henneman, Jr.. The second interview was held on March 8, 2005 between Examiner Colin, Mr. Henneman, and S.P.E. Albert Decady. Applicant appreciates the cooperative spirit of both interviews, and thanks Examiner Colin and S.P.E. Decady for their time and constructive assistance.

In the first interview, the technical teachings of USPN 6,151,649 (Liong et al.) and USPN 6,622,250 (Castillo et al.) were discussed. Mr. Henneman asserted that the disclosure of Liong et al. was limited to bus connections and/or connections requiring some sort of termination. Mr. Henneman also asserted that Liong et al. does not disclose sensing power drawn by a computer/monitor or the SCSI device of the reference. Mr. Henneman further pointed out that Castillo et al. does not disclose terminating a network connection responsive to the system entering a low power mode. No agreement was reached with respect to the teachings of the references. Examiner Colin indicated that he needed additional time to consider the references and suggested that Applicant present the arguments in a response to the final office action.

In the second interview, the same points regarding the technical teachings of the prior art references were raised. Examiner Colin and S.P.E. Decady pointed out that the limitations of the

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claims were being interpreted very broadly. In particular, the term "communications channel" was interpreted to include bus connections. Further, "sensing power drawn" was being interpreted to include sensing a voltage being asserted on a bus by a device, and concluding that the power drawn by the device was below a threshold level if the voltage asserted by the device on the bus fell below a predetermined threshold level.

Although no agreement was reached with respect to specific language that would place the claims in condition for allowance, it was agreed that changing the "communications channel" limitations to "network connection" limitations would more clearly distinguish the present invention over the prior art of record. It was also agreed that adding a power outlet limitation and reciting that the power sensor sensed power drawn from the outlet would more clearly distinguish that aspect of the present invention over the prior art of record. Finally, it was agreed that if the amendments to the independent claims included subject matter that was previously presented in the independent or dependent claims, then no additional search would be required, so that the need for such a search would not preclude allowance of the claims if otherwise determined to be allowable.

Applicant has attempted herein to set forth a fair and accurate summary of the content of the two interviews discussed. Applicant encourages the Examiner to carefully review this interview summary and to point out any perceived inaccuracies. Again, Applicant appreciates the constructive and cooperative spirit of the interviews.

Rejections Under 35 U.S.C. § 103:

Claims 1-9, 12, and 16-19 are rejected under 35 U.S.C. § 103 as being unpatentable over USPN 6,151,649 (Liong et al.) in view of USPN 6,622,250 (Castillo et al.).

Applicant respectfully traverses.

M.P.E.P. §2143 sets forth the requirements of a *prima facie* case of obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

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Claims 1, 2-9, and 11-13:

As amended herein, Claim 1 recites:

1. A personal computer protection device for disconnecting a computer system from a network connection during power down periods, said personal computer protection device comprising:  
an AC outlet for providing electrical power to a monitor of the computer system; means for sensing an amount of power drawn from said AC outlet by said monitor;  
a housing having an input port for connecting to a network;  
an output in said housing for connecting said input port to a network connection of the computer system; and  
a relay in said housing connected between said input port and output port for selectively disconnecting said input port and output port automatically upon said sensing means sensing the power drawn from said AC outlet is below a threshold value indicating the computer system is in a powered down or sleep state.

None of the cited references, either alone or in combination, disclose "sensing the power drawn" by a computer system, a monitor, or any device for that matter. Nor do any of the cited references disclose terminating a network connection when the power drawn is below a threshold value. Therefore, because the cited references, either alone or in combination, do not teach or suggest every limitation of Claim 1, no prima facie case of obviousness is established with respect to Claim 1.

Liong et al. discloses a terminator switch 340 for terminating a SCSI bus when a SCSI device connected to the bus via the terminator switch 340 is powered down, disconnected, or otherwise fails. Contrary to the Examiner's assertion, the terminator switch of Liong et al. does not sense the power drawn by the SCSI device. Instead, the terminator switch 340 monitors the "term power" on the device side of the SCSI bus. The term power is not the power drawn by the SCSI device. Rather, the term power is asserted on lines of the SCSI bus by the SCSI device. As shown in FIG. 4, and explained at Col. 5, Lines 44-55, "term power" is asserted on 4 of the 68 pins of the SCSI bus connector by the SCSI device.

Rather than sensing the power drawn by the SCSI device, the terminator switch simply monitors the term power signal asserted by the device. If the term power goes low, the terminator switch assumes that the SCSI device has been powered down, disconnected, or suffered some other type of failure. Note that if the SCSI device has simply been disconnected from the SCSI bus instead of being powered down, the term power will go low, but the SCSI

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device may still be drawing full power from its power source. However, the terminator switch takes the same action as if the SCSI device had been powered down and was drawing no power. It would, therefore, be illogical to conclude that the terminator switch is taking action based on the power drawn by the SCSI device. The power drawn by the SCSI device is simply not monitored.

Liong et al. also does not disclose disconnecting a network connection. Instead, the terminator switch of Liong et al. disconnects a bus connection and substitutes termination circuitry for that of the disconnected SCSI device. As the Examiner points out, Liong et al. discloses that the invention is not limited to SCSI buses. However, the passage of the reference cited by the Examiner is clearly directed to bus connections. The passage reads:

It will also be apparent to those workers having ordinary skill in the art in light of the description provided herein that although the inventive structure and method have been described in the context of a Small Computer System Interface (SCSI) bus and clustered system environment, that the invention itself is not limited to SCSI buses but rather the inventive principles of detection disconnection of a component on a bus and rapidly substituting the disconnected components attributes by another circuit having comparable attributes is applicable to other bus configurations, communication links, and the like.  
(emphasis added)

It is clear that the inventive principles are detecting the disconnection of a component on a bus and using a substitute circuit to provide attributes (e.g., termination) of the disconnected component. There is no indication that the invention is applicable to network connections. Indeed, when a PC is powered down, no such termination is required on conventional network connections. It is therefore clear that the term "communication links" in the cited passage does not refer to network connections. Rather, the teaching of the reference is clearly limited to connections that require some sort of termination upon disconnection of a component.

Castillo et al. also does not disclose sensing the power drawn by a computer system/monitor or terminating a network connection when the power drawn is below a threshold value. Rather, Castillo is directed to an isolation circuit 150 for isolating a portion of a computer bus 160 when components of the system bus 111 enter a low power mode, thereby allowing components on the isolated bus 160 (e.g., network adapter 190) to continue to operate normally.

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Thus, the circuit of Castillo et al. operates exactly the opposite of the present invention. The present invention disconnects the network connection when the computer system enters a low power state, whereas the circuit of Castillo et al. isolates bus 160 when system components enter a low power mode so that the network connection (via network adapter 190) can be maintained. Therefore, not only does Castillo et al. fail to teach or suggest the limitations of Claim 1, the reference cannot be considered to suggest disconnecting a network connection when a computer goes into low power mode. Thus, the first and third elements of the prima facie case of obviousness are not satisfied.

Finally, Applicant notes that USPN 5,721,934 (Scheurich) does not disclose sensing the power drawn by a computer system/monitor or terminating a network connection when the power drawn is below a threshold value. Rather, Scheurich discloses a device that monitors activity on user interface devices (e.g., a keyboard or mouse) and a telephone line, and terminates or restores power to the computer system responsive thereto. The Examiner has not asserted that Scheurich teaches or suggests either of these limitations of Claim 1. Applicant has merely reviewed the reference, in an effort to be thorough, to ensure that Scheurich did not provide the teachings found lacking in the previously discussed references.

For the foregoing reasons, Applicant asserts that no prima facie case of obviousness is established with respect to Claim 1, because the cited references do not teach or suggest sensing power drawn by a computer/monitor and/or terminating a network connection if the power drawn falls below a predetermined threshold value. Allowance of Claim 1 is, therefore, respectfully requested.

Claims 2-9 and 11-13 depend either directly or indirectly from Claim 1 and are distinguished from the cited prior art for at least the reasons provided above with respect to Claim 1.

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Claim 15

As amended herein, Claim 15 recites:

15. A personal computer protection device for disconnecting a computer system from a network connection during power down periods, said personal computer protection device including:

a housing having input and output ports for various types of network connections, with one input port being connected through a line to one output port for each particular type of network connection;

a plug connectable to an AC power source;  
an AC outlet for providing electrical power;  
means for sensing a power drawn from said AC outlet  
by said computer system;

a relay in said housing in each line connecting an input port to an output port;

said sensing means disabling each relay for disconnecting the input ports from the output ports when the power drawn from said AC outlet is below a threshold value indicating the computer system is in a powered down or sleep state; and

a manually operated switch for disabling said relays to move said protection device from an on mode to an off mode.  
(emphasis added)

Because Claim 15 recites a housing having ports for “various types of network connections”, “means for sensing power drawn from said AC outlet”, and “disconnecting the input ports from the output ports when the power drawn from said AC outlet is below a threshold value”, Claim 15 is distinguished from the cited prior art for at least the reasons provided above with respect to Claim 1. Therefore, allowance of Claim 15 is respectfully requested.

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Claims 16, 17, and 19:

As amended herein, Claim 16 recites:

16. A personal computer protection device for  
disconnecting a computer system from a network connection  
during reduced power periods, said personal computer protection  
device comprising:  
an AC power outlet;  
**a power sensor monitoring power drawn by a monitor of the computer  
system from said AC power outlet;**  
**a housing having an input port for connecting to a network;**  
an output in said housing for connecting said input port to a network connector of  
the computer system; and  
a relay in said housing connected between said input port and output port for  
**selectively disconnecting said input port and output port automatically  
upon said power sensor detecting that the power drawn is below a  
threshold value** indicating the computer system is in a reduced power state.  
(emphasis added)

Because Claim 16 recites “a power sensor monitoring power drawn by a monitor of  
the computer system from said AC power outlet”, “an input port for connecting to a  
network”, and a relay “selectively disconnecting said input port and output port automatically  
upon said power sensor detecting that the power drawn is below a threshold value”, Claim 16  
is distinguishable over the prior art of record for at least the reasons provided above with  
respect to Claim 1. Therefore, allowance of Claim 16 is respectfully requested.

Claims 17 and 19 depend from Claim 16, and are therefore distinguishable from the prior  
art of record for at least the same reasons as Claim 16.

For the above reasons Applicant requests reconsideration and withdrawal of all of the  
rejections under 35 U.S.C. § 103.

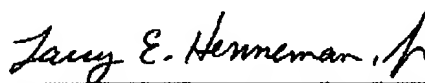
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Applicant notes that the amendments to the independent claims made herein introduce subject matter that was already present in one or more of the previously presented claims. In particular, Claim 8 previously recited "an AC power switch for turning off all power to said protection device and computer." Claim 12 recited "said device is connected to a power source and includes a power outlet for connection with and supplying power to the computer system." Claim 18 recited "wherein said input in said housing is a network connector." Thus, the primary distinctions over the prior art advanced in this amendment/response were present in the claims prior to the issuance of the final office action. Therefore, no additional search should be required, and allowance of the pending claims should not be denied based on a need for an additional search.

For the foregoing reasons, Applicants believe Claims 1-9, 11-13, 15-17, and 19 are in condition for allowance. Should the Examiner undertake any action other than allowance of all remaining claims, or if the Examiner has any questions or suggestions for expediting the prosecution of this application, the Examiner is requested to contact Applicants' attorney at (269) 279-8820.

Respectfully submitted,

Date: 3/18/05



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**CERTIFICATE OF FACSIMILE TRANSMISSION (37 CFR 1.8(a))**

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being transmitted via facsimile, on the date shown below, to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, at (703) 872-9306.

Date: 3/18/05

  
Larry E. Henneman, Jr.